### The Role of CHW in Brain Care

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### **Objectives**

- Review the Collaborative Dementia Care Trial
- Describe the structure and the tools of the Aging Brain Care (ABC) Program
- Review early pilot data
- Describe the development of the new work force for the ABC program



# The Collaborative Dementia Care Model (CDCM)

#### **Caregiver Focus:**

- -Problem solving skills
- -Counseling
- -Respite care
- -Support group

#### **Primary Care Clinician:**

- -detect and treat delirium
- -detect and treat BPSD
- -Enhance cholinergic system by
- -Prescribe ChEIs
- -Discontinue Anticholinergic

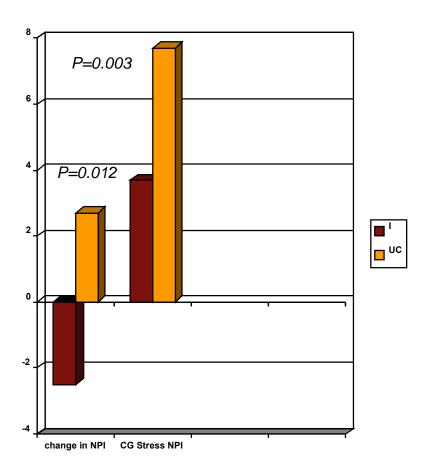
# Dynamic Feedback Clinical Liaison Coordinate and Deliver Expert Team: -Geriatrician -Social Psychologist -GeroPsychiatrist Coordinate and Deliver

#### **General Environmental Modification:**

- -Medication adherence support
- -Home safety assessment

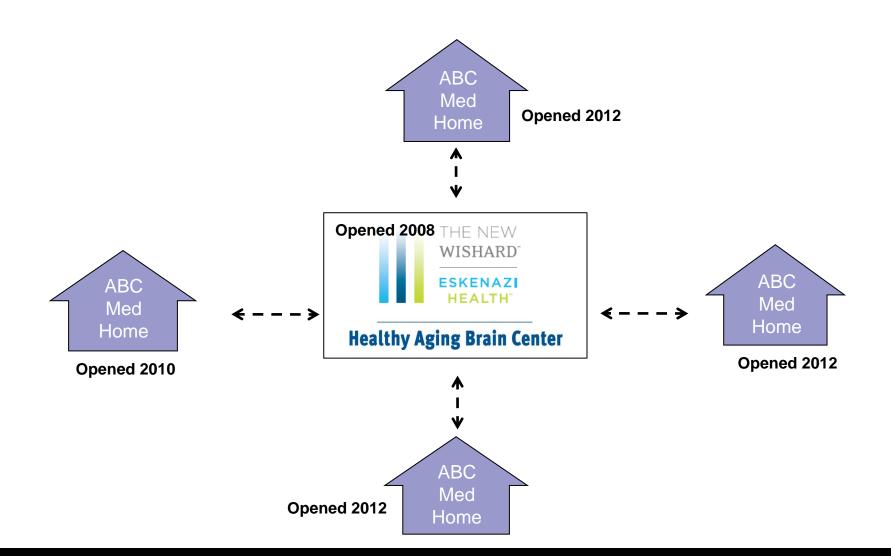
### The Impact of CDCM

- CDCM led to 7 point improvement in Neuropsychiatry Inventory (NPI)
- Number need to Treat (NNT) = 3.7
- Each 1 point decline in NPI = \$250-\$400 in health care expenses
- CDCM saved 1750-\$2800 per patient
- Improvement in family stress

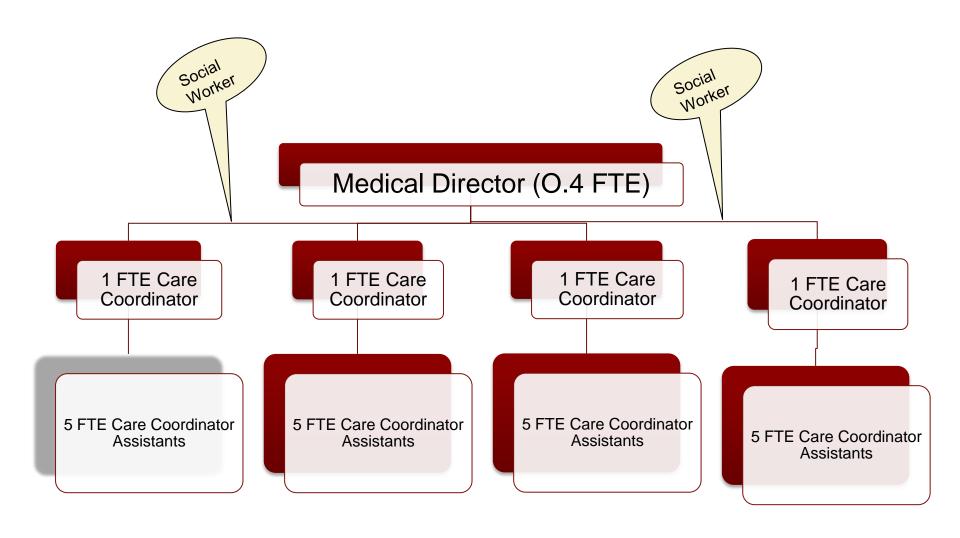


Callahan, Boustani et al, JAMA 2006

### From "JAMA" to Aging Brain Care Service Line at Wishard!



#### The ABC MedHome Organizational Structure





#### **Standardized ABC Minimum Care**

- Check Hospital & ER Alerts every day
- 2. Coordinate with Inpatient services
  - a) Alert hospital team of presence of CI/ Depression
  - b) Medications conciliation
  - c) Connect with family caregiver
  - d) Request ACE consult
  - e) Coordinate post discharge transition
- 3. Post discharge care
  - a) Home visit within 72 hours of discharge
  - b) Mediation reconciliation
  - c) Coordinate Home Care visit
  - d) Coordinate post hospital orders
  - e) Deliver Delirium protocol and handout

- 4. Ongoing Aging Brain Care
  - a) Manage Depression
    - i. PST
    - ii. SSRI
    - iii. CBT
  - b) Manage Cognitive Impairment
    - i. ChEIS (if needed)
    - ii. D/c Anticholinergics
    - iii. Caregiver counseling and education
    - iv. Mediation adherence support

# ABC Tools www.agingbraincare.com

- ABC Multiple Mini Interview
- ABC Training Curriculum, Implementation Process, and Fidelity assurance
- ABC Symptoms Monitor (HABC-M)
- ABC Care Protocols
- ABC Informal Caregivers Handouts
- Anticholinergic Cognitive Burden Scale
- ABC Mobile Office with a tablet PC, Smart phone, access to Internet and Intranet
- A team workstation Hub
- Population Management Software (eMR-ABC)

#### **ABC Performance (Pilot program)**

The Acute Care Service Utility Domain	ABC	PCC
% patients with at least one ER visit	28%	49%
Total number of ER visits	124	1143
% patients with at least one hospitalization	13%	26%
Total number of hospitalizations	45	438
Mean/Median length of hospital stay	5/4	7 / 4



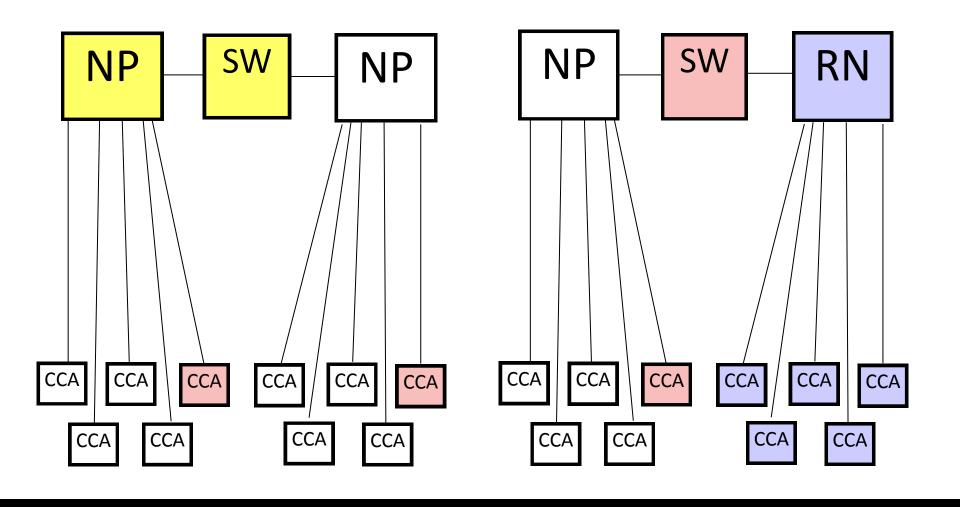
#### **ABC Performance (Pilot program)**

The Quality of Care Indicator Domain	ABC	PCC
% seen at ER again within one week	14%	15%
% re-hospitalized within 30 days of discharge	11%	20%
% with at least one order of definite anticholinergics	19%	40%
% with at least one order of neuroleptics	5%	5%
% with at least one order of anti-dementia drugs	55%	13%
% with at least one order of antidepressant drugs	68%	48%
% with at least one order of definite anticholinergics and anti-dementia drugs	16%	32%
% with at least one LDL order	82%	72%
% of patients with LDL < 130	45%	23%
% with at least one HbA1c order	78%	62%
% of patients with HbA1c < 8	78%	51%
% with last systolic BP < 160	27%	24%

# Early Data First quarter 2013 Jan 1 to March 30

Variable	
Total Active patients	2234
Total visits	5190
Mean age	76.5 yrs
Full Dementia Responders	54% to 91%
Major depression full responders	38% to 43%
Cost reduction per resident (n= 194)	40% (95% CI 20% to 60%)

### **STAFFING PLAN**



### The New Workforce (CCA)

#### Care Coordinator Assistant (CCA) Role

- Based on "task shifting" concept: tasks that require less training and expertise are provided by less expensive members of the care team
- Standardized care protocols delivered under close supervision.
- 2 levels:
  - CCA-I: at least high school diploma
  - CCA-II: have 2-year degree

### **CCA** Responsibility

- Enroll patient/caregiver in the program
- Conduct patient/caregiver biopsychosocial needs assessment
- Deliver specific care protocols
- Monitor medication adherence
- Manage data entry in eMR-ABC
- Manage patient/caregiver psychosocial care needs

All under close supervision of NPs, RN, and MSWs

### **Innovative Onboarding Model**

- ➤ Initial phone screen with questions about experience and attitudes along with Wishard team and skills-focused questions
- ➤ Follow-up face-to-face interview with additional questions about experience and attitudes along with Wishard team and skills-focused questions
- > A Six-Station Multiple Mini Interviews (MMIs) evaluation

### **Multiple Mini Interview**

- Multiple Mini Interview (MMI) used in the admissions process in a growing number of medical schools
- Changes interview process from "Tell me about what you can do" to "Show me what you can do."

### **Multiple Mini Interviews**

- 6 stations
- Each with a different interviewer
- Candidates assessed on their ability to <u>do</u> something, for example:
  - Communicate
  - > Exhibit critical thinking
  - Demonstrate empathy

### **MMI Stations**

Station 1: Develop rapport with both patient and caregiver

Station 2: Maintain composure under stress

Station 3: Demonstrate compassion

Station 4: Educate caregiver and patient

Station 5: Prioritize multiple needs

Station 6: React positively to photo of elderly person

### **Each MMI Station**

- Identified goal(s)
- Description of scenario
- Role descriptions for SPs
- Door note
- Background information for interviewer
- Assessment with open-ended questions and Likert-scale evaluations



# Interview Station 1: Develop Rapport with Patient and Caregiver



# Interview Station 4: Educate Caregiver and Patient





### **Interview Station 6: React Positively to Photo**



In addition, standard Q&A interview was part of this station.



# Five minutes per station with 2 minutes allotted to prep for the next station.



### **Candidate Assessment**

- Performance at each station evaluated by interviewers
- Open-ended questions at some stations
- 2-3 performance evaluation items were created for each station
  - Each item was rated by the interviewer on a Likert-type scale (1=Lowest to 5=highest)
  - Anchoring terms for scores of 1, 3, and 5 were created

### **Evaluation of Empathy**

Interviewer's Evaluation of the Empathy

Did applicant overtly notice (through obvious gesture, touch or comment) that the patient was distraught/crying? \_\_\_\_\_ Yes \_\_\_\_ No Ability of applicant to display empathy by responding to the patient's emotion

Did not appear Showed some concern Clearly concerned Concerned Made some effort to comfort Was caring and comfort patient patient worked hard to comfort patient

### Three Global Ratings of Each Candidates

- After each individual station, interviewer ranks candidate
- After all candidates have completed station, interviewer ranks all candidates
- After post-interview group debrief interviewer ranks all candidates again

### **Post Interview Group Debrief**

Interviewers met together immediately following the MMIs to discuss, rank candidates, and identify those candidates to whom an offer of employment would be made.

### **Total N Interviewed and Hired**

- 62 screened candidates invited to an MMI session
- 4 MMI Sessions were conducted between July and November 2012
- 21 CCAs were hired

## Comparison of Performance of Hired vs. Non-hired Candidates

- Interviewers' ratings of CCA candidates performance after all CCA interviews were significantly different for most stations (hired scoring better than those not hired)
- Scores on Station 3 (empathic response) was most discriminating
- Scores on Station 6 (perception of elder in picture) were least discriminating

### **Conclusions about the Screening Process**

- MMI provides a discriminating process for hiring CCAs based on key attributes
- The scoring by interviewers resulted in increasing ability to discriminate performance of desirable candidates
- Even a 5 Station MMI with 2-3 items per station can help select top candidates from those who passed HR screening

### **CCA Training**

### Two week training included:

- Interactive sessions
- Clinical immersion
- Three half days of simulation with trained standardized patients in Medical Education Simulation Center

### **Interactive Sessions**

- Imbedded didactic lectures
- Video sessions (e.g. Iris, The Notebook, and HBO series on Alzheimer's disease)
- •Role playing utilizing both current ABC staff and trainees (e.g. assessment tools, communication skills, and caregiver interventions)
- •Teambuilding (e.g. collaborative care model, team lunches, and CCA gift exchange)
- Reflective reading and writing

### **Clinical Immersion**

- Shadowed at Healthy Aging Brain Center and observed
  - neuropsychological testing
  - physician exam
  - > family conference
- Accompanied ABC Medical Home staff during home visits
  - initial visit with assessments
  - protocol delivery
- eMR-ABC
  - practiced data entry
  - trained in population health functions of the eMR-ABC

### **Simulations**

- Three half days
- Trained standardized patients in Medical Education Sim Center
  - ➤ Each CCA conducted a "home visit" with two trained standardized patients (caregiver/patient dyad), while being videotaped
  - Immediately following the session CCAs provided feedback on the interaction by the standardized patients

### **CCA Simulations with SPs**

- Watched the videotape of their encounter, completed self-assessment
- Participated in small group debrief on their experience, viewing several videotapes
  - > Identified areas of strength and improvement
  - > Communication skills, active listening, non-verbal
- Repeated encounter a 2<sup>nd</sup> time to improve their performance, delivery of service and level of comfort (videotaped)





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# Progress Report [1 year]

- New Hires
  - ➤ 2 Nurse Practitioners
  - ➤ 1 Registered Nurse
  - ➤ 1 Social Worker
  - > 20 CCAs
    - 3 from CICOA; 5 from Arnett
  - > 4 Program Administrators
  - > .40 Medical Directors
- 20 CCAs trained and deployed
  - > Lost 1 CCA to an administrative role
- 2000 patients enrolled





### AGING BRAIN CARE MEDICAL HOME TEAM



### **Collaborators**

Mary Austrom
Cathy Alder
Christopher Callahan
Ann Cottingham
Michael LaMantia
Debra Litzelman